中国牙甲总科滨甲屬昆虫志

蒲 蟄 龙

(中山大学生物系昆虫学教研組)

我国鞘翅目牙甲总科滨甲屬(Ochthebius)的昆虫,1939 年以前的記录,只有3种。1939年以后,由我国各地陆續采集了不少这一處昆虫,現将本屬的昆虫进行分类学的研究,使能进一步了解我国滨甲屬昆虫的种类和分布。

截至目前止, 發現的滨甲屬昆虫共有 12 种, 1 亚种, 分隶 6 个亚屬。

屬的一般形态

体形长, 体色棕、棕黑或黑, 常有金屬光澤。 虫体背面常披有微小的短毛或平伏的长毛, 也有光滑無毛的。

头部一般有刻点,刻点的粗細深浅因种类而异。点間光滑或粗糙。額头頂区有二显著的凹陷,头的后部有一較小的凹陷。复眼突起,甚显著。唇基頗大。口上縫一般稍弯。上唇大,寬度約与唇基相等,前緣完整,或成深浅不等的弯飲或缺刻。触角短,錘状,9节,基部4节光滑,端部5节披毛,成长形的錘状部。下顎鬚4节,較触角短,第1节短小,第2节細长,第3节长而較粗,其端部尤粗大,第4节短小,在 Henicocerus 亚屬尤甚。頦梯形或矩形,通常有稀疏刻点,前緣常有缺刻。

前胸背板可分为两部分,中央部分称为盘状部,两侧称为耳状部。盘状部与耳状部間由一条縱形或斜形的沟所分隔。前胸背板形状因种类和亚屬的不同而异,有横形的,有近矩形的,有近心形的。前胸背板的刻紋形状和数目也因种类和亚屬的不同而异,有成縱形沟,横形沟,斜形沟,深的刻陷或浅的刻陷。有許多种类在盘状部有一中央縱沟,两侧有前后刻陷各一对,这些刻陷称为盘部前陷和盘部后陷。前胸背板前緣(包括盘状部及耳状部的前緣,本文以后应用这个名詞,均包括这两部分)弯陷,近于平直,弯拱或略呈波状弯曲;后緣一般略弯拱,較前緣窄;侧緣(包括盘状部和耳状部的側緣,本文叙述前胸背板側緣,均包括这两部分)自前部起,或自中部起,或自后部起縮窄,縮窄部有透明膜围繞着。

小盾片小,三角形,有刻紋或光滑。

前胸腹板短,通常披有稀疏短毛,在前足基节間的部分極窄。中胸腹板通常披有稀疏 短毛,由二縱形小隆脊縱分为三部分,前部有一横形小隆脊,在中足基节間的部分通常呈 三角形。后胸腹板大,有些种类全部光滑無毛,有些全部披毛,还有一些中部光滑,其余部 分披毛。

鞘翅长形或卵形, 隆拱, 有縱形条紋或由刻点所成的縱紋, 有时刻点混乱而不成条, 亦有無显著刻点的。翅基突緣通常明显。鞘翅后角通常寬圓, 緣折一般不达于鞘翅的末端, 但 Henicocerus 亚圈的鞘翅緣折达于鞘翅末端。

足顏色較淡。前足及中足基节短柄状、錐状或筒状,粗糙,一般披柔毛,后足基节长, 橫置,粗糙,一般披柔毛。腿节光耀,披稀疏短毛或不披毛。脛节光耀,較长于或等长于腿 节,通常有刺及刻点,端部較大。跗节5节,較脛节短,第1节極短,第2节也短,这两节互 相紧接,分界極不明显,現为一节,第3节及第4节約等长,末节較长。爪纖細而弯。

腹部有⁷腹板, 基部 ⁵ 腹板色較深而暗, 披柔毛, 第 ⁶、第 ⁷ 腹板色淡而光耀, 有时有 稀疏的短毛或微小刻紋或刻点。

在中国發現的滨甲屬的亚屬共有 6 个, Henicocerus, Aulacochthebius, Homalochthebius, Asiobates, Bothochius 及 Hymenodes。

滨甲屬亚屬的检索表

1(2)	鞘翅緣折达鞘翅的末端。下顎鬚末节很短————————————————————————————————
2(1)	鞘翅絲折不达鞘翅的末端。下顎鬚末节較长
3(4)	前胸背板極寬而短,有二深橫沟。体形小,长約1毫米··············· Aulacochthebius
4(3)	前胸背板不大横寬,一般無橫沟,有时有找橫沟。体形較大,一般体长在1.5毫米以上
5(7)	前胸背板寬度显著地超过长度,侧微自后半部起向內縮窄
6(10)	前胸背板有一中央縱沟,盘状部一般無刻陷,如有刻陷,也不明显 Homalochthebius
7(5)	前胸背板呈心形,侧緣自中部或自前半部起向內縮窄
8(9)	鞘翅的刻点不規則····································
9(8)	鞘翅的刻点排成許多蹤列紋····································
10(6)	前胸背板在中央縱沟每旁有盘部前陷及盘部后陷各— Asiobates

亚屬 Henicocerus Steph.

本亚屬只發現一种,为 Ochthebius salebrosus 新种。这个新种的發現,是本亚屬昆虫 在我国的首次紀录。本亚屬昆虫以前在印度馬来亚区也沒有發現过。

Ochthebius (Henicocerus) salebrosus, sp. nov.

体长 1.48 毫米, 宽 0.68 毫米。体色黑, 形长, 背面極粗糙不平。

头部色黑,額头頂区連复眼成梯形,中部隆起,隆起部略呈长三角形,其上有十多个頗深刻点,刻点聞較光滑,一般比刻点小,前部無刻点,質地粗糙,隆起部每旁有一大而呈瓜仁形的凹陷,凹陷大小約与中央隆起部相等,凹陷区質地粗糙,顏色黑而带棕。口上縫頗深而弯。唇基呈矩形,稍隆起,刻点顏大,刻点間隙光滑,一般較刻点窄。上唇比唇基大,略呈牛圆形,有頗深的刻点,刻点間隙光滑,前部無显著刻点,前緣中部有深缺切。下顎鬚色較淡,末前节长大,末节微小,末端平截。頦棕黑色,光耀,近于矩形,有刻点,刻点大小不規則,前緣和側緣几乎平直。

前胸背板黑色,稍呈心形,但寬度仍稍超过长度。盘状部略呈六角形,刻点大而深,密,刻点間隙光滑,一般比刻点窄,但侧部的間隙稍寬。中央縱沟中部狹窄。盘状部有盘部前陷及盘部后陷各一对,盘部前陷的界綫頗清楚,但盘部后陷的界綫不大清楚,因而,盘状部后部現出了一条不显著的横陷。在盘部后陷的外方,还有一个凹陷,其位置近前胸背板后角。上述三对凹陷大小相差不远,只是盘部后陷界綫不大清楚,其大小頗不易观察。盘状部与耳状部之間無显明分沟,整个盘状部隆起,其侧緣頗陡直,下方外側即为耳状部。

耳状部色較淡,光滑,其寬度約与盘状部的前緣的相等,有粗糙而深色的边緣。前胸背板前緣近于平直;侧緣由中部稍后处縮窄,縮窄部有窄透明膜围繞着;后緣稍后突。前胸背板前角圓,后角近直角形。

小盾片色黑,小,三角形。

胸部腹板色黑,前胸腹板滿布微小顆粒,有一橫沟。中胸腹板光耀,后部后伸于中足基节間。后胸腹板粗糙,側部披毛頗密。

鞘翅色黑,长度約等于前胸背板 2.5 倍,刻点排成縱列点紋,刻点頗大,刻点之間的部分显著地隆起,有許多刻点由小横沟互相連通,結果形成了在鞘翅上有許多不規則的横沟形象。縱列点紋的間条較刻点窄,有許多很微小的縱形隆起或粒状隆起。由于上述各种构造关系,鞘翅显出了凹突不一、高低不平的形象。鞘翅侧緣稍弯拱,突緣显著,前角圓,后角寬圓。

足棕黑色。前足基节稍呈球形,薄披短毛。中足基节柄状,質地与前足同。腿节光耀,有微小而稀疏的刻点。脛节短,有頗稀疏的刺。跗节末节大而长,长度約与前4节的长度相等。爪纖細而弯。

腹部基部 5 腹板暗黑色,粗糙,披柔毛。第 6 腹板光耀,薄披稀疏的小毛。第 7 腹板黑色,小,刻点均匀,后部有一不明显的横沟。

完模标本: Q, 著者于1939年11月12日采自云南澂江。采集地点为一終年积水水池, 其中水生植物頗丰富。完模标本存中山大学昆虫标本室。在云南澂江这一种是十分稀少的, 著者在該地区經7、8个月不断采集, 只采得标本1头。

本种与 O. exsculptus Germ. 及 O. halbherri Reit. 的区别在于額头頂区的刻 較深大和該区的光滑質地。

亚屬 Aulacochthebius Kuw.

本亚屬的昆虫只發現一种,为 Ochthebius hunanensis 新种。这个新种的發現,是本亚屬昆虫在我国的首次紀录。

Ochthebius (Aulacochthebius) hunanensis, sp. nov.

体长 1.00 毫米, 寬 0.50 毫米。体色棕黑, 体形长。

头部黑色,光滑,無显著刻点或刻紋,披頗长而平伏的蓝色毛,毛易脫落,制成的标本,可能脫去許多毛。額头頂区橫形,色稍带棕,中部有一长形而光滑的隆起部,側部有近于三角形的大形凹陷,凹陷的前后部均隆起,前部隆起較大。复眼突出。口上縫梁,稍弯拱。唇基色黑,光滑,中部稍隆起,無显著刻点或刻紋。上唇粗糙,比唇基小,近半圆形。下颚 鬚短,棕黑色,第3节特大而长,端部加厚,第4节小,末端尖細。頦黑色,矩形,刻点頗深大,刻点間隙光滑,一般比刻点窄。

前胸背板極寬,光滑,棕黑色,披頗长而平伏的蓝色毛,無显著刻点。盘状部寬度約等于耳状部寬度的三倍。盘状部前部有一深而稍弯的黑色横沟,該横沟的每端外側有一长形的凹陷,似横沟的延伸部,盘状部后部也有一横沟,长度和顏色与前部横沟無大区别,但較直,該横沟的每端外側也有一凹陷,盘状部中央有一縱沟,縱沟較横沟窄。耳状部質地

与盘状部同,两者由一縱沟分界。耳状部前部也有不大明显的横沟。盘状部前緣中部些微 突出,后緣平直。耳状部前緣成一頗深缺刻,側緣弯缺,后緣近平直,前角突出成指状,后 角近直角形。盘状部后角尖突。

小盾片黑色,光耀,三角形。

前胸腹板黑色,粗糙,中央有小縱隆脊,后部后伸于前足基节間,成短刺状。中胸腹板



MI 0. hunanensis, 新种,雄性外生殖器

黑色,粗糙,后部后伸于中足基节間成三角形片。 后胸腹板黑色,粗糙,披毛,中央部分稍突起,菱 形,光耀,其中部有一些小刻点,侧部有沟。

鞘翅棕黑色,长度約等于前胸背板的 2.5 倍, 有極小而疏的毛,有由刻点排成的縱列点紋,这些 刻点頗深而大,第 2 至第 4 的縱列点紋中,有两条

不达于鞘翅末端, 縱紋的間隙光滑, 比刻点小, 些微隆起。鞘翅突緣不显著, 內緣有隆起而 光耀的边緣, 前角圓, 后角寬圓。 足棕黑色。前足基节粗糙, 近圓筒形, 薄披柔毛。中足基节極粗糙, 近柄状。各足腿

足标黑色。而足基节粗糙,近国简形,薄披柔毛。中足基节極粗糙,近柄状。各足腿节光耀,有一些刻点。脛节端部涨大,刺細长,頗密。跗节5节,末节最长。爪纖細而弯。

腹部基部 4 腹板暗棕黑色,薄披短毛。第 5 腹板色較浅,光耀,披毛較少。第 6 腹板較长,顏色及質地与第 5 节同,披毛稀疏,第 7 腹板小,光耀,后緣呈半圓形,披毛稀疏,腹部末端有长毛。

雄性外生殖器近于圆筒形。基叶略弯,近中部处有一小缺,缺刻末端的部分漸形尖 細。端叶呈膜質,近筒状,端部圓形,有些标本端部卷繞不伸。側叶細长,长度与陽茎約相 等,近端部处略胀大,披極短疏毛,端部尖。

完模标本: ♂, 著者于 1941 年 7 月 29 日采自湖南省宜章县的架源堡村。异模标本: ♀, 采集时間地点同完模标本。副模标本: 29 头, 采集时間地点同完模标本; 5 头, 著者于 1941 年 9 月 5 日采自衡陽; 107 头, 陈湘芷于 1944 年春間采自湖南省攸县。上述标本, 存中山大学昆虫标本室。

本种的个体大小及颜色变异颇大。采自衡陽的标本,体色较黑,体积较大。采自宜章和攸县的标本,体躯較小,体色也較淡。

本种在湖南省宜章县一带是一个常見种类,自春日开始在水稻田、灌溉水渠、积水坑等处很容易采到,在冬天个体数量减少。

本种近似 O. assiaticus Orchym., 但与該种有下列区别: 前胸背板的耳状部側緣齊陷不深, 第 1 至第 4 腹节腹板的毛不浓密, 雌虫雄虫第 6 腹节的腹板比第 5 腹板长。O. assiaticus Orchym. 的原叙述十分简单, 又未描述雄性外生殖器, 但根据上列几点形态上的不同, 本种和該种有种的区别。

亚屬 Asiobates Thoms.

本亚屬的昆虫,在我国只發現一种,为 Ochthebius nitidus 新种。这个新种的發現,是本亚屬昆虫在我国的首次記录。

Ochthebius (Asiobates) nitidus, sp. nov.

体长 1.92 毫米, 寬 0.84 毫米。体色棕黑, 体形长。

头部棕黑色。額头頂区有稀疏而不規則的刻点,刻点間隙光滑;額头頂区的中部近前緣处有一长形小凹陷,接口上縫,后部有一近于菱形的小凹陷;額头頂区在复眼間有两个大形凹陷,凹陷的大小因个体不同而有变异。口上縫寬,两側尤寬,稍弯拱。唇基中部隆起,有稀疏小刻点,刻点間光滑。上唇有不規則刻点,刻点間隙光滑,前緣稍弯陷。下顎鬚色較头部色浅,末前节大,棒状,末端色較深,末节末端尖。頦棕黑色,近矩形,有稀疏及規則的刻点,刻点間隙光滑,前緣弯陷,侧緣平直。

前胸背板棕黑色,但顏色較头部色浅,有一些个体前胸背板的顏色和头部顏色沒有显

著的差別。前胸背板寬度显著地超过长度,盘 状部有不規則的刻点,刻点比头部背面的刻 点大得多,刻点間隙光滑。中央縱沟頗深,两端 尖細。盘部前陷深,斜置,近于椭圆形,盘部后 陷深,較前陷大,形长而斜置。盘状部与耳状部 之間的沟深。耳状部外侧及后部有刻点。前胸 背板前緣有狹窄膜質緣,中部稍突出,两侧各有



圖2 O. nitidus, 新种, 雄性外生殖器

一不显著的小弯陷; 側緣由后方三分之一处起縮窄, 縮窄处起点有一小尖突, 縮窄部有长形透明膜围繞着, 这透明膜繞过了前胸背板的后角; 后緣稍后突。前胸背板前角寬圓, 后角近于圓形。

小盾片棕黑色,三角形,粗糙,端部光滑。

胸部腹板棕黑色,粗糙。前胸腹板后伸于前足基节間,中央有縱形隆脊。中胸腹板后部后伸于中足基节間,成三角形小片。后胸腹板两侧披毛,中部光滑。

鞘翅棕黑色,长度約等于前胸背板 8 倍,披有極小的毛,有由頗大的刻点排列而成的 縱紋,縱紋的間条微隆起,無刻点,較刻点稍寬。鞘翅基端近內緣处稍隆起,鞘翅前部三分 之一处有一不明显的大形浅陷,緣突显著,前角圓,后角寬圓。

足顏色較背面稍浅。前足及中足基节柄状,披毛。各足腿节有不規則刻点,披薄毛。各足脛节稍呈棒状,披密而粗的刚毛。跗节末节长,长度約等于前数节相加长度。爪纖細而弯。

腹部基部 5 腹板暗黑色,粗糙,披厚毛。第 6 腹板色較淡,光耀,其后部有細小刻点及稀疏短毛。第 7 腹板顏色与第 6 节相同,后部有长毛。

雄性外生殖器的基叶长而弯,基端前方縮窄,基端呈半球状。端叶短,呈鐘状,末端有陷,陷內有一小棒。側叶細长,端部有一些短毛。

完模标本: ♂, 著者于1940年 8 月 26 日采自云南省禄丰村的一条溪水中。异模标本: ♀, 采集日期地点与完模标本同。副模标本, ⁴头, 采集日期及地点与完模标本同。上述标本存中山大学昆虫标本室。

本种与 O. amplicollis Champ. 及 O. kosiensis Champ. 的区别在于背面沒有明显的 毛; 和 O. laevisculptus Reit. 的区别在于鞘翅有較大的刻点; 和 O. atricapillus Reit. 的

区别在于上唇前緣的弯陷浅而平滑。

亚屬 Homalochthebius Kuw.

本亚屬昆虫,在我国过去曾有一种的紀录即 O. yunnanensis Orchym., 其后,著者在我国發現新种一种及新亚种一种。現将各种制成检索表, 并分别加以叙述。

Homalochthebius 亚屬的种及亚种检索表

- 2(1) 鞘翅無明显黑斑
- 3(4) 上唇有許多微小顆粒状突起,質地粗糙。唇基比額头頂区小…… yunnanensis Orchym.
- 4(3) 上唇無顆粒状突起。唇基与額头頂区儿乎等大……… yunnanensis furcatus, subsp. nov.

Ochthebius (Homalochthebius) unimaculatus, sp. nov.

体长 2.20 毫米, 体宽 0.90 毫米。体色棕黑, 体形长卵形。

头棕黑色,有一些个体呈黑色,也有一些个体的头部背面微带紫銅色(重庆标本),有些个体带青銅色(曲江标本),头部一般無明显短毛,但曲江标本有較明显的短毛。額头頂区的刻点在完模标本和异模标本是相当密的,重庆的一些标本刻点較疏,曲江标本的刻点很不規則,在中部有一些刻点連成短刻紋,使該部形成粗糙凹突的質地,各地标本的刻点間隙均光滑。复眼之間有两个大形凹陷,每凹陷中部有裂条状縱紋。上唇和額头頂区的等大,有刻点,雄虫上唇的前緣稍弯陷,雌虫的弯陷較深。下顎鬚色較头部浅,末前节大,棒状,末节小,末端尖細。上顎外侧有短而頗粗的毛列。頦棕黑色,稍呈矩形,有頗疏刻

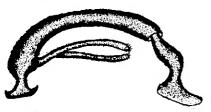


図3O. unimaculatus, 新种,雄性外生殖器

点,刻点間隙光滑,額的前緣稍弯陷。

前胸背板顏色与头部的相似,寬度显著地超过 长度。盘状部刻点頗深大,中部的刻点較疏,后部的 较密,前部的較小,有一些个体后部的刻点也較小。 中央縱沟窄,前部尖,前后两端均不达背板的前后 緣,雌虫的中央縱沟較寬,但采自曲江的雄虫标本的 中央縱沟也較寬。耳状部和盘状部之間的凹陷大,

耳状部有刻点,刻点和盘状部的差不多相同。前胸背板前緣稍弯陷,繞以透明的窄膜;侧緣由后部三分之一处縮窄,縮窄部有透明的膜围繞着,这透明膜繞过了前胸背板的后角,在側緣开始縮窄的地方,有一个微小的刺状突起;后緣中部稍后突。前胸背板前角圓,后角近直角形。

小盾片黑色,三角形,基部色暗而粗糙,端部光滑。

胸部腹板色黑,粗糙。中胸腹板披毛,后部呈三角形,三角形部分的后端呈刺状,后伸于中足基节間。后胸腹板披厚毛,后部中央有一光滑無毛的小区。

鞘翅色較前胸背板的稍浅,长度約等于前胸背板 2.5 倍,每鞘翅有一个稍呈弯形而不大明显的黑斑,該黑斑位于鞘翅基部,占鞘翅一半以上的长度,在鞘翅颜色較浅的标本,这个黑斑較为显著。每鞘翅有 10 条深显的縱列点紋,此外,有由一点或两点所成的小盾片紋,有一些标本的小盾片紋不显著。鞘翅縱列点紋的間条光滑,稍隆起,約与点紋等寬。

鞘翅緣突頗显著, 侧緣弯拱, 有隆起小边緣。鞘翅前角圓, 后角寬圓。

足棕色。前足基节粗糙,錐状,薄披短毛。中足基节粗糙,近球形,質地与前足基节同。各足腿节光耀,有微小而不規則的刻点。脛节光耀,有刺。跗节末节长,前足中足末节长度約等于前数节相加长度,后足末节长度稍短。爪纖細而弯。

腹部基部 5 腹板暗黑色, 披毛。第 6 腹板棕色, 光耀, 基部有微小刻紋, 端部有小毛。第 7 腹板稍呈半圓形, 后緣有一列长毛。

雄性外生殖器的基叶长形,徽弯,基部前方縮窄。端叶短于陽茎基極多,端部扩伸呈喇叭口状。侧叶細长,长度短于基叶,端部有一些短毛。

完模标本: ♂,著者于1940年10月8日采自貴陽。异模标本: ♀,采集日期与地点与完模标本同。副模标本: 23头,采集日期及地点与完模标本同;1头,林世平于1941年10月22日采自广东省曲江;49头,陈湘芷于1942年3月26日采自重庆。上述标本存中山大学昆虫标本室。

本种雄虫上顎外緣的刚毛比雌虫的粗得多,这特征是本种的主要第二性征。雌虫上唇前緣弯陷較雄虫的深,这也是雌雄分別的一个好特征。

本种和 O. perudus Reit. 的区别在于具有小盾片缝; 和 O. coomani Orchym. 的区别在于前胸背板的刻点較深而大。

Ochthebius (Homalochthebius) yunnanensis Orchym.

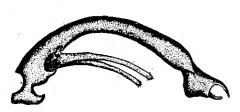
Ochthebius (H.) yunnanensis Orchymont 1925, Ann. & Bull. Soc. Ent. Belg., 65:263, Orchymont 1935, Peking Nat. Hist. Bull., 9:188, Wu 1936, Cat. Ins. Sin., 3:271, Orchymont 1942, Bull. Mus. Hist. Nat. Belg. 18(39):16.

1925年 d'Orchymont 叙述了这一个种。标本采自云南,可是沒有小地名,也有几个标本的标签写着采自"云南或日本"。模式标本存 d'Orchymont 处和柏林昆虫博物館。1942年 d'Orchymont 补充描叙并圖示这一种昆虫的雄性外生殖器。著者于 1939 及 1940年 在云南各地采得这个亚屬的标本凡数百头,采集地点包括昆明、昆陽、晋宁、大理、澂江等县,标本外形均極相似。昆明、昆陽、晋宁和大理的标本,其雄性外生殖器的构造和 O. yunnanensis Orchym. 的相同,澂江标本的雄性外生殖器就显著地不同,其他构造也有不同处,因此,澂江的种类是有别于 O. yunnanensis 的, 現鑒定为一新亚种, 叙述見后。

Ochthebius (Homalochthebius) yunnanensis furcatus, subsp. nov.

体长2.10毫米, 寬0.90毫米。体形长, 鞘翅近长卵形, 体色棕褐。

头部棕黑色,有金屬光澤,披稀疏短毛。額头頂区有深而較大的刻点,刻点間隙光耀, 較刻点微寬,有些标本的刻点連成許多不規則的刻紋;复眼間有两个大形凹陷,凹陷中央 有縱形裂沟,凹陷外側有一个光滑的部分。口上縫寬,拱形。唇基薄披短毛,側緣直,刻点 較疏而較小,無显著的顆粒状小突起(雌虫的有一些)。上唇大,差不多与唇基等大,刻点的 情况相似,但稍疏,沒有顆粒状小突起,前緣仅稍弯缺,側緣圓形。下顎鬚棕紅色,末前节 涨大,末节末端尖細。頦棕色,近距形,前緣近于平直,有疏而頗大的刻点,刻点間隙光 滑。 前胸背板棕色,寬度显著地超过长度。色較头部浅。盘状部中央色黑,披不显著的微小短毛,有深刻点,刻点比額头頂区的大而密,刻点間隙有些比刻点宽,有些比刻点窄。盘状部中沟窄,黑色,前后端均不达鞘翅前后緣,中部較窄,前部較寬,有些标本中沟的两端寬度和中部差不多一样。中沟后部有一色較前胸背板稍深而不甚明显的橫形浅陷。盘状部和耳状部分界的沟寬大而稍弯,耳状部色較盘状部浅,刻点和盘状部相似,但較浅較小



随 4 O. yunnanensis furcatus, 新亚种, 雄性外生殖器

也較疏。前胸背板前緣頗平直,有窄膜質緣; 侧緣前部四分之三圓拱,后部自三分之一处起縮窄,縮窄处有透明膜围繞着,这透明膜也繞过后角;后緣稍后突。前胸背板前角圓,后角直角形。

小盾片色黑,三角形,基部有微小刻紋,其 他部分光滑。

胸部腹板色黑,粗糙,披薄毛。前胸腹板横形,后部中央后伸于前足基节間,呈三角形。中胸腹板中央有由小隆脊包围而成的杏仁形部分,后部后伸于中足基节間。后胸腹板大,后部中央有一近心形的光滑部分。

鞘翅顏色与前胸背板的相似,长度約等于前胸背板 8 倍,披稀疏短毛。鞘翅刻点縱形行列深而大,小盾片縫短,有些标本的小盾片縫只由一点所成,縱紋的間条光滑,稍隆起, 寬度約与縱紋等大或稍大。鞘翅緣突頗显著,前角圓,后角寬圓。

足棕色。前足基节近圓錐形,粗糙,端部披毛。中足基节长球形,粗糙,端部披毛較前足密。各足腿节有疏而带毛的微小刻点。各足脛节有粗密的刚毛。前足及后足的跗节末节长度与基部数节相加长度約相等,中足的略短于基部数节相加长度。不纖細。

腹部基部 5 腹板棕黑色,粗糙,披毛。第 6 腹板棕色,光耀,雄虫披稀毛,后綠稍弯陷,第 6 腹板基部有做小刻紋。雄虫第 7 腹板小,近半圆形,后緣有毛,雖虫第 7 腹板小,后部中央稍突,两旁平直。

雄性外生殖器的基叶长而弯,基端前方縮窄。端叶短,端部有一个鉗状的构造,两个 鉗支的大小不同。侧叶細长,較基叶短,端部有一些短毛。

完模标本: ♂,著者于 1939 年 4 月 26 日采自云南省澂江县。异模标本: ♀,采集日期地点与完模标本同。副模标本: 140 头,采集日期地点与完模标本同; 60 头,于 1939 年 9 月采自同上地点; 20 头,于 1940 年 1 月采自同上地点。上述标本存中山大学昆虫标本室。

本亚种極似 O. yunnanensis Orchym., 但体色一般較深, 唇基較大, 且無明显的顆粒 状小突起, 上唇也沒有这种突起。O. yunnanensis Orchym. 的唇基和上唇都有較 明显的 顆粒状突起。

亚屬 Bothochius Rey

本亚圆的昆虫,在我国前后發現5个种。現知的种类,分布于新疆、陜西、云南、西藏等地。

Bothochius 亚屬的种检索表

	上唇前綠弯陷梁	
· verrucosus Pu	背面有微小顆粒,質地粗糙	2(3)
	背面質地光滑	3(2)
lobatus, sp. nov.	鞘翅的刻点有一些排列成行	4(5)
irkestanus Kuw.	鞘翅的刻点不排列成行	5(4)
	上唇稍弯陷或几乎平直	6(1)
caucasicus Kuw.	上唇梢穹陷或几乎平直 前胸背板稍呈心形····································	7(8)
67	会和Madia 1日 起水 6年 191	9(7)

Ochthebius (Bothochius) flexus, sp. nov.

体长 1.82 毫米, 寬 0.84 毫米。体色棕黑, 背面有平伏蓝色毛, 体形长。

头部棕黑色,有鲖色光澤。額头頂区有小而頗深的刻点,但有些个体的刻点不大明 显,刻点間隙光耀,一般比刻点寬。額头頂区在复眼之間有一对大而深的凹陷,其后有一 小形的凹陷。口上縫寬, 弯拱。唇基的刻点和額头頂区的相似。上唇大, 粗糙, 有刻点及 毛,呈半圆形,前緣几乎平直。下顎鬆短,色較头部背面的浅,末前节大而长,末节末端尖 細。類色較头部背面的浅, 近梯形, 有疏而不規則的刻点, 前緣弯陷, 侧緣稍弯陷, 后緣乎 直。

前胸背板顏色与头部相同,寬度显著地超过长度。盘状部刻点的大小及深度与額头 頂区的相似,近前緣及近后緣的刻点較密,刻点間隙光耀,比刻点寬。背板中央縱沟頗深, 前部扩大,末端尖細,有些标本前部不扩大,有些标本的中沟两端都扩大。盘部前陷及盘 部后陷近椭圆形,前陷较短,后陷较长,稍斜向,有些标本的前陷较圆,后陷较短较浅。盘

状部和耳状部之間的沟长形, 大而頗深。前胸背板各凹陷 的質地均粗糙。耳状部的占前胸背板长度三分之一,顏色 較浅, 質地凹陷不平, 耳状部側緣几平直。前胸背板前緣微 弯陷, 有狹窄的膜質緣; 側緣由前部三分之一处向內縮窄, 縮窄部稍弯, 丼繞以膜質緣, 該膜質緣繞过前胸背板后角; 后緣中部突出。前胸背板前角及后角圓寬。



O. flexus, 新种,雄性外生 殖器

小盾片色黑,三角形,光滑。

胸部腹板暗黑色,粗糙,披毛。前胸腹板中央稍隆起成縱形隆脊,后部后伸于前足基 节閩成刺状。中胸腹板的小隆脊围成三角形,后部后伸于中足基节間成长三角形的刺状 构造。后胸腹板大,披毛較前胸、中胸的厚。

韜翅棕黑色, 色較胸稍淡, 长度約等于前胸背板 3 倍, 刻点頗深而大, 有一些刻点排成 縫列,刻点間条光耀,一般比刻点大,有極傲小而密致的綫紋,雌虫比較明显。鞘翅的內外 緣均有小边緣,內緣的小边緣以后部的較明显。鞘翅的緣突及側沟頗明显,前角頗銳,后 角圓寬。

足棕黑色, 較体躯腹面顏色浅。前足基节柄状, 粗糙, 披毛。中足基节近球形, 粗糙, 披毛。各足腿节有披毛的疏刻点。各足脛节近直形,端部稍大,前足脛节刚毛短,中足脛 节刚毛較长而密,后足脛节刚毛长而疏,各脛节近端部的毛均較长及較粗。跗节末节长,

前三节的末端各有一小毛。爪纖細而弯。

腹板基部 5 腹板暗黑色, 横形而窄, 粗糙, 披毛。第 6 腹板棕黑色, 窄, 基部粗糙, 端半 部有微小刻点及纖小的毛。第7腹板棕黑色,光耀,有微小刻点,后緣弯拱,中部有微小缺 刻。

雄性外生殖器的基叶长,極弯曲,基部前縮窄,中部極狹小,末端尖。端叶比基叶短極 多,末端圓拱。侧叶細长,末端有短毛。

完模标本: ♂, 著者于 1940 年 3 月 26 日采自云南省陆丰村。异模标本: ♀, 采集日期 地点与完模标本同。副模标本:7头,采集地点与完模标本同。上列标本存中山大学昆虫 标本室。

本种与 O. turkestanus Kuw, O. nobilis Villa 及 O. rugusae Kuw, 的区别在于几 乎平直的上唇前緣;和 O. detritus Rey 的区别在于前胸背板前緣弯陷極微;和 O. caucasicus Kuw. 的区别在于較为横形的前胸背板。

Ochthebius (Bothochius) lobatus, sp. nov.

体长 2.16 毫米, 寬 1.08 毫米。

本种極似 O. flexus, 与該种之区別在于下列特征: 体积較大, 头部及前胸背板的刻点 較不清楚,上唇前緣的缺刻較深, 鞘翅無密致的小紋而 有一些較疏而微小的长形裂紋状刻紋。本种雄性外生 殖器基叶在近基部三分之一处縮窄,基叶末端較尖长, 端叶較圆。O. flexus 的雄性外生殖器基叶在近中部 处縮窄,末端胀大部分比 O. lobatus 的大,形状也不 同,端叶近长筒形。基于上述主要特征,本种可与 O. flexus 有种的区别特征。



図6 O. lobatus, 新种, 雄性外 生殖器

完模标本: ♂, 陈湘芷于 1942 年 8 月 8 日采自四川重庆。异模标本: ♀, 采集时間与 地址与完模标本同。副模标本: 26 头, 与完模标本同时同地采集。上述标本存中山大学昆 虫标本室。

亚屬 Hymenodes Muls.

本亚屬昆虫, 我国过去未有紀載, 本文紀录 2 种, 均新种。

亚屬 Hymenodes 的种检索表

- 1(2) 前胸背板中央縱沟完整…………
- 2(1) 前胸背板中央縱沟中断,分为前后二部……

Ochthebius (Hymenodes) exilis, sp. nov.

体长 1.80 毫米, 寬 0.80 毫米。体色深棕黑, 有金屬光澤, 背面有平伏的长毛。

头深棕黑色,刻点大,疏,不大凊楚。額头頂区及唇基有黴小的顆粒突起,致質地粗 糙;額头頂区在复眼間有两个近椭圆形的深陷,其后有一較小凹陷。口上縫稍弯拱。唇基 近梯形。上唇半圓形,略小于唇基,有密而頗粗的刻点,披毛頗长而密。下颚鬆棕色,末前节大而长,末节端部稍尖細。頦棕黑色,近四角形,有微小顆粒,并有規則刻紋及刻点,前緣中部弯陷頗深,側緣稍弯陷。

前胸背板色如头部, 寬度比长度稍大, 盘状部有極微小顆粒突起及頗疏而小的刻点, 中央縱沟后部縮窄, 前后两端尖細, 其后端几乎达到背板后緣, 前端不达前緣。 盘部前陷

近圓形, 盘部后陷长椭圓形。盘状部和耳状部分界的沟大,稍斜置,其前端不达前緣。耳状部也有頗疏的小刻点。前胸背板前緣近平直;侧緣在中部之前以后部分向內縮窄,縮窄部有透明薄膜,該薄膜围繞前胸背板后角;后緣向后突。前胸背板前角近直角形,后角圓。

小盾片深棕黑色,三角形,光耀。



圖 7 0. exilis, 新种, 雄性外生殖器

胸部腹板色黑,粗糙。前胸背板披柔毛,中部稍成脊状隆起,后部后伸于前足基节間 成三角形突起。中胸腹板侧緣披毛,中部隆起成长三角形片,并后伸于中足基节間。后胸 腹板厚披白毛,后緣中部有一小凹陷。

鞘翅深棕黑色,色較头部及胸部的稍浅,长度約等于前胸背板 2.5 倍,每鞘翅有 10 行刻点,刻点間条稍隆起,有微小顆粒突起,寬度与刻点略等稍大。鞘翅內緣有小光滑边緣,外緣稍弯拱,有隆起小边緣。鞘翅緣突显著,前角直角形,后角寬圓。

足棕黑色, 前足及中足基节近柄状, 粗糙, 披毛。腿节有不規則的带毛刻点。脛节端部大, 有粗大而頗密的刺毛。跗节末节长, 約与前数节等长。爪纖細而弯。

腹部基部 5 腹板暗黑, 窄, 粗糙, 披毛。第 6 腹板較寬, 色較浅, 光耀, 粗糙, 有些标本 該节基部不粗糙。第 7 腹板小, 光耀, 近半圓形。腹部末端有一些纖細刚毛。

雄性外生殖器的基叶长而稍弯,略向端部尖細基端前方縮窄。端叶短,近刀片状。侧叶細长,其端部有短毛。 、

完模标本: ♂,1940 年 3 月 20 日著者采自云南省陆丰村。异模标本: ♀,采集时閒地 点与完模标本同。副模标本: 8 枚,采集时間地点与完模标本同。上述标本存中山大学昆 虫标本室。

本种雌雄之別在于雌虫腹部末端無显著刚毛。

本种与 O. foveolatus Germ., O. nitidipennis Champ., O. flumineus Orchym. 及 O. explanatus Orchym.的区别在于上唇前緣無显著弯陷; 与 O. cupricollis Champ. 之别在于較长的鞘翅; 与 O. scintillans Champ. 及 O. sexfoveatus Champ. 之别在于鞘翅刻間条有微小顆粒突起; 与 O. strigosus Champ. 之别在于前胸背板只有 5 个凹陷。

Ochthebius (Hymenodes) octofoveatus, sp. nov.

体长 1.68 毫米, 寬 0.80 毫米。体深棕色, 有鳎色光澤。

头部深棕色,有微小顆粒状突起。額头頂区带紅銅色光澤,有少数刻点,复眼間有两个大形凹陷,其后有一較小凹陷,每个大形凹陷的后側方有一小形突起部,額头頂区中央有一近长方形突起部分,該突起部后方有一浅縱陷。唇基橫形,色較額头頂区深。上唇色

略浅于唇基,长度約与唇基相等,有不显著的微小顆粒状突起,有刻点,前緣中部有呈半圓形的深缺刻。下顎鬚深棕色,末前节大,近錘状,末节末端尖細。頦棕色,近四边形,粗糙,有微小而不規則的刻点,前綠硝弯陷。

前胸背板色似唇基,寬度較长度略大。盘状部有似头部的微小顆粒状突起。中央縱 沟两端尖細,均不达前胸背板的前后緣,該縱沟分为前后二部,前部的沟略长于后部。盘 部前陷近椭圆形,盘部后陷长形,稍斜向,前后陷的宽度与中沟約相等。盘部前陷与后陷 的两旁均各有一凹陷,在前陷两端者較小,在后陷两端者較大。盘状部及耳状部的分界沟 长而大。耳状部色浅于盘状部,也有微小顆粒状突起。前胸背板前緣几乎平直,有窄膜 緣;侧緣由前部三分之一处向內方縮窄,縮窄部有薄膜围繞,該薄膜繞过前胸背板后角;后 緣有窄膜緣,中部后突;前胸背板前角近直角形,后角圆宽。

小盾片三角形,有極微小顆粒状突起。

前胸及中胸腹板棕黑色,有顆粒状突起。前胸腹板中央有隆脊,后部后伸于前足基节 問。中胸腹板后部成三角形片,后伸于中足基节問。后胸腹板大,棕色,粗糙,薄披柔毛, 后緣中部有小缺刻。

鞘翅色較前胸背板浅,长度約等于前胸背板2倍,每鞘翅有10行刻点,刻点問条光滑,略隆起,一般比刻点寬或与刻点等寬。鞘翅內緣有一边緣,側緣弯拱,有隆起小緣。鞘翅緣突显著,前角圓,后角圓寬。

足棕色。前足及中足的基节近柄状,粗糙,薄披柔毛。各足腿节和脛节有微小刻紋。脛节的刺毛頗密。跗节末节长而大。爪纖細而长。

腹部腹板棕色, 粗糙, 基部 5 腹板窄, 薄披柔毛。第 6 腹板較寬, 中部光耀, 有微小刻点, 基部侧方粗糙有柔毛, 端部侧方有不規則小刻点及柔毛。第 7 腹板近半圆形, 光耀, 有不規則的微小刻点, 基部有不显著的刻紋。

完模标本: Q, 著者于 1940 年 3 月 26 日采自云南省陆丰村, 存中山大学昆虫标本室。本种与 O. foveatus Germ. 及 O. nitidipennis Champ. 之别在于鞘翅的刻点行列的 間条稍隆起; 与 O. cupricollis Champ. 的区别在于鞘翅較长; 与 O. sexfoveatus Champ. 之别在于鞘翅沒有显著的柔毛; 与 O. exilis 新种, O. flumineus Orchym. 及 O. explanatus Orchym. 之别在于前胸背板中央縱沟分成前后两部分。

THE GENUS OCHTHEBIUS LEACH OF CHINA (COLEOPTERA, PALPICORNIA)

Pu Chih-lung

Department of Biology, Sun Yatsen University

The present paper deals with twelve species and one subspecies of the genus Ochthebius from China, of which eight species and one subspecies are new to science.

Ochthebius (Henicocerus) salebrosus, sp. nov.

Size, 1.48 mm. long, 0.68 mm. wide.

Head significantly narrower than pronotum; fronto-vertex black, with moderately

large and dense punctures, intervals glabrous, narrower than the punctures and generally raised into ridges, two large irregular depressions between the compound eyes; epistomal suture arched; clypeus coarsely and irregularly punctured, intervals glabrous and slightly raised; labrum larger than the clypeus, proximal area with transversely arranged punctures, intervals glabrous, slightly raised, anterior margin semicircular, deeply emarginate medially; maxillary palpus lighter in color, penultimate segment large and long, ultimate segment minute, distal extremity truncate; mentum dark brown, transverse, shining, somewhat quadrangular, nearly straight anteriorly and laterally; punctures irregular in size,

Pronotum black, more or less heart shaped; disc coarsely and densely punctured, intervals glabrous and generally narrower than the punctures; median longitudinal furrow deep, constricted medially, anterior and posterior depressions moderately deep, a depression situated exteriorly to the posterior depression; outer depressions large; anterior margin nearly straight, lateral margin retracted posteriorly from a point just behind the middle, the hind part of retracted portion lined with a narrow translucent membrane, posterior margin slightly arched; anterior angles rounded, posterior angles rectangular.

Scutellum black, triangular.

Prosternum dark brown, large, granulate, with a transverse groove; mesosternum black, shining, hind area extended posteriorly between the middle coxae; metasternum dark brown, roughened, much larger, thickly pubescent laterally.

Elytra black, punctures of longitudinal series moderately large; intervals narrower than the punctures with minute protuberance, the punctures of each series communicated with those of the others by transverse minute grooves; interstices glabrous, very narrow and raised into ridges; lateral margin slightly arched; humerales moderately prominent; anterior angles rounded, posterior angles broadly rounded.

Legs brown; front coxae more or less globular, thinly pubscent, middle coxae somewhat peg-like, with the same texture; femora shining, minutely and sparsely punctured; tibiae with short and moderately sparse spines; distal segment of tarsi large and long, subequal to the preceding segments together; claws slender and curved.

Five proximal abdominal sterna dull black, roughened, pubescent; sixth sternum shining, sparsely and minutely pubescent, median area minutely punctured; seventh sternum black, smaller, evenly punctured, posterior area with an indistinct transverse groove.

Holotype, one female from Chengkiang, Yunnan. November 12, 1989, collected by the author, in the insect collection of Sun Yatsen University.

Ochthebius (Aulacochthebius) hunanensis, sp. nov.

Size, 1.00 mm. long, 0.50 mm. wide.

Head black, glabrous, with long procumbent blue hairs; fronto-vertex transverse, a globular glittering and prominent swelling at the middle, two irregular depressions laterally near the compound eyes; a glittering swelling in front and a smaller one behind each depression; epistomal suture deep, slightly arched; clypeus glabrons; labrum roughened, semicircular; maxillary palpi dark brown, short, third segment large and long, thickened distally, fourth segment tapering distally; mentum black, somewhat rectangular, moderately coarsely and deeply punctured, intervlas shining, generally narrower than the punctures.

Pronotum very transverse, dark brown, shining, with long procumbent blue hairs, without apparent punctures; anterior discal transverse groove moderately deep, an elongated depression at each of its extremities, posterior discal transverse groove as deep as the anterior one with an elongated depression at each extremity; median longitudinal furrow moderately deep, narrower than the transverse groove; anterior margin arched; lateral margin lined with narrow translucent membrane, slightly concave anteriorly,

retracted posteriorly; posterior margin arched; anterior angles pointed, posterior angles rectangular.

Scutellum black, shining, triangular.

Prosternum black, roughened and transverse, posterior area prolonged posteriorly to form a carina between the anterior coxae; mesosternum dark brown, roughened, posterior area prolonged posteriorly between the middle coxae; metasternum black, roughened and pubescent, middle area raised into a large, glabrous rhomboid area and with a depressed area laterally and posteriorly to recieve the posterior femur.

Elytra dark brown, with sparse minute hairs and a moderately deep large series of setigerous punctures, intervals and interstices shining, generally narrower than the punctures, very slightly raised; humerales not prominent; inner margin with a glabrous border; anterior angles rounded, posterior angles broadly rounded.

Legs dark brown; anterior coxae roughened, somewhat cylindrical, very thinly pubescent; middle coxae somewhat peg-like, very roughened; femora glabrous, more or less fusiform, with few punctures; tibiae thickened distally and thinly pubescent, subequal to their respective femora, tibial spines slender and moderately dense; distal segment of tarsi long; claws slender and curved.

Abdomen dark brown; four proximal sterna dull, roughened, and thinly pubescent; fifth, sixth and seventh sterna lighter in color, shining, with sparser pubescence.

Basal lobe of phallus large, somewhat cylindrical, dorsal and ventral portions prolonged into minute and long distal prolongations respectively; distal lobe membranous; lateral lobes slender and long, subterminally setose and swollen.

Holotype, one male from Ichang, Hunan Province, July 29, 1941, collected by the author. Allotype, one female with the same locality and date as the holotype. Para types, twenty-nine specimens, with the same locality and date as the holotype; five specimens from Hengyang, Hunan Province, September 5, 1941, collected by the author; one hundred and seven from the same province, spring, 1944, collected by Miss S. C. Chen. All types in the insect collection of Sun Yatsen University.

Ochthebius (Asiobates) nitidus, sp. nov.

Size, 1.92 mm long, 0.84 mm. wide.

Form elongated; fronto-vertex dark brown, sparsely and irregularly punctured, intervals glabrous; fronto-vertex with a small anterior and posterior depression, two large depressions between the compound eyes and a small triangular median depression behind; epistomal suture slightly arched; clypeus elevated medially with sparse minute punctures; labrum dark brown, coarsely punctured, intervals glabrous, shallowly and smoothly emarginate anteriorly; maxillary palpi brown, penultimate segment large, club shaped, with distal end darker in color, ultimate segment tapering distally; mentum dark brown, more or less rectangular, sparsely punctured, intervals glabrous, anterior margin emarginate, lateral margin straight.

Pronotum dark brown; disc irregularly and moderately coarsely punctured, intervals glabrous, median longitudinal furrow moderately deep with tapering extremities; anterior discal depressions deep and oblique, somewhat elliptical in outline, posterior discal depressions deep, elongated and oblique, outer depressions large; anterior margin slightly arched medially with narrow membranous border; lateral margin retracted from the posterior third and lined with elongated translucent membrane, the latter encircling the posterior angle of pronotum; posterior margin arched; anterior angles broadly rounded, posterior angles less so.

Scutellum dark brown, roughened, triangular.

Thoracic sterna dark brown, roughened; prosternum longitudinally carinate medially; mesosternum extended posteriorly between the middle coxae; metasternum thinly pube-

scent laterally, glabrous medially.

Elytra dark brown, minutely pubescent, with series of moderately large punctures, interstices slightly raised, glabrous, wider than the punctures; lateral margin arched with minute elevated border; inner margin with elevated border; humerales prominent; anterior angles rounded, posterior angles broadly rounded.

Legs dark brown; anterior and middle coxae peg-like, sparsely pubescent; femora somewhat peg-like, irregularly punctured, sparsely pubescent; tibiae somewhat clubshaped, densely spinose; distal segment of tarsi nearly as long as the preceding segments together.

Five proximal abdominal sterna dull black, roughened, densely pubescent; sixth sternum lighter in color, shining, its posterior area finely punctured and sparsely covered with minute hairs; seventh sternum like the preceding in color, but glabrous and with numerous long hairs posteriorly.

Basal lobe of phallus long and curved; distal lobe irregularly triangular, with a hollow at the distal extremity, in which there is a slender rod; lateral lobes slender, much shorter than the basal lobe, with a few minute setae distally.

Holotype, one male from Lou-fong-tsouen, Yunnan Province, March 26, 1940, collected by the author. Allotype, one female with the same locality and date as the holotype. Paratypes, four specimens with the same locality and date as the holotype. All types in the insect collection of Sun Yatsen University.

Ochthebius (Homalochthebius) unimaculatus, sp. nov.

Size, 2.20 mm. long, 0.90 mm. Wide.

Head dark brown or black, some specimens with metallic shining, without apparent pubescence in most specimens; fronto-vertex and clypeus moderately densely punctured in most specimens, intervals shining; labrum large, transverse, punctured, anterior margin slightly emarginated in male, deeply emarginated in female; maxillary palpi brown, large, penultimate segment large, club-shaped, ultimate segment small, tapering distally; the exterior margin of mandible with rows of brownish, short and thick spines, which are thicker in male; mentum brown, middle area black, somewhat rectangular, anterior margin broadly emarginate, moderately sparsely punctured, intervals shining and wider than the punctures.

Pronotum dark brown; disc moderately coarsely punctured, the punctures near the anterior and posterior margins generally somewhat smaller; median longitudinal furrow generally narrower in male with tapering anterior end; outer depressions wide; anterior margin slightly emarginated, with translucent narrow membranous border; lateral margin retracted from the posterior third and lined with narrow translucent membrane which encircles the posterior angle, a minute spine-like outgrowth present at the posterior end of the non-retracted portion; posterior margin slightly arched medially; anterior angles rounded, posterior angles rectangular.

Scutellum black, triangular; proximal area dull and roughened, distal area glabrous. Thoracic sterna black; prosternum roughened and transverse; mesosternum roughened, pubescent, spine-like posteriorly between the middle coxae; metasternum roughened and heavily pubescent, with a glabrous portion at the posterior area.

Elytra dark brown, with an irregular black mark on each elytron, ten series of circular deep punctures and a very short scutellar suture on each elytron, the punctures separated by narrow intervals, interstices glabrous, slightly raised and subequal to the punctures in width; inner margin with minute black border; lateral margin somewhat arched, with black minute elevated border; humerales moderately prominent; anterior angles rounded, posterior angles broadly rounded.

Legs brown; front coxae roughened, conical, granulated, minutely sculptured and

minutely lightly pubescent; middle coxae roughened, globular, with the same texture as the front coxae; femora brown, shining, minutely and irregularly punctured; tibiae brown, shining, spinose; tarsi with distal segment long, subequal to the preceding segments together on the front and middle legs, but somewhat shorter on the hind legs; claws slender and curved.

Five proximal abdominal sterna dull black and pubescent; sixth sternum brown and shining, its proximal area with minute sculpture, distal area glabrous, minutely pubescent; seventh sternum dark brown, more or less semicircular, posterior margin with a row of long setae.

Basal lobe of phallus elongated, curved; distal lobe somewhat oval in outline, expanded distally; lateral lobes slender, minutely setose distally, shorter than the basal lobe.

Holotype, one male from Kweiyang, Kweichow Province, October 8, 1940, collected by the author. Allotype, one female with the same locality and date as the holotype. Paratypes, twenty-three specimens with the same locality and date as the holotype; forty-nine specimens from Chungking, Szechuen Province, March 26, 1942, collected by Miss S. C. Chen; one specimen from Chiuchiang, Kwangtung Province, October 22, 1941, collected by Mr. Sping Lin. All types in the insect collection of Sun Yatsen University.

Ochthebius (Homalochthebius) yunnanensis furcatus, subsp. nov.

Size, 2.10 mm. long, 0.90 mm. wide.

Head dark brown with metallic shining, thinly pubescent; frontovertex coarsely and deeply punctured, intervals shining, generally broader than the punctures, two large depressions between the compound eyes; epistomal suture arched and broad; clypeus with sparse and small punctures, not significantly granulated; labrum large, with punctures as those on clypeus, but sparser, anterior margin slightly emarginated in the male and deeply notched in the female; maxillary palpi brown red, penultimate segment greatly swollen, ultimate segment tapering distally; mentum brown, sparsely punctured, intervals glabrous, anterior margin nearly straight.

Pronotum brown, disc black, minutely pubescent, coarsely and densely punctured; median longitudinal furrow black, narrow, not reaching the margins of pronotum, an ill-defined transverse depression posteriorly to the median furrow; outer depressions distinct; anterior margin nearly straight; anterior third of the lateral margin arched, posterior fourth retracted, lined with moderately broad translucent membrane which encircles the posterior angle of pronotum; posterior margin slightly arched; anterior angles rounded, posterior angles rectangular.

Scutellum dark brown, triangular.

Thoracic sterna black, roughened and thinly pubescent; prosternum transverse, with posterior area between front coxae triangular; mesosternum with posterior area between the middle coxae spine-like; metasternum with a glabrous heart-shaped area medioposteriorly.

Elytra dark brown, very minutely pubescent; series of punctures deep and large with very short scutellar suture; interstices glabrous, subequal to the punctures in width, slightly raised; intervals of punctures narrow; humerales moderately prominent; anterior angles rounded, posterior angles broadly rounded.

Legs light brown; anterior and middle coxae roughened; femora with sparse setigerous minute punctures and short hairs; tibiae strongly spinose; tarsi with distal segment subequal to the preceding segment together.

Five proximal abdominal sterna dark brown, roughened, pubescent; sixth sternum brown, shining, sparsely pubescent, posterior margin very slightly emarginate; seventh

sternum small, more or less semicircular, pubescent along posterior margin.

Basal lobe of phallus curved, median portion slightly narrowed; distal lobe spear-headed in shape, with a forceps-like outgrowth distally; lateral lobes slender and curved, minutely setose distally, shorter than the basal lobe.

Holotype, one male from Chengkiang, Yunnan Province, April 26, 1939, collected by the author. Allotype, one female from the same locality and date as the holotype. Paratype, one hundred and forty specimens with the same locality and date as the holotype; sixty specimens from the same locality, September, 1939, collected by the author; twenty specimens from the same locality, January, 1940, collected by the author. All types in the insect collection of Sun Yatsen University.

Ochthebius (Bothochius) flexus, sp. nov.

Size, 1.82 mm. long, 0.84 mm. wide.

Dorsal surface covered with blue procumbent hairs, head shining, dark brown, with metallic sheen; fronto-vertex punctured, intervals shining and generally wider than the punctures; a pair of large and deep depressions between the compound eyes, a small median depression behind; epistomal suture arched; clypeus punctured as fronto-vertex; labrum large, roughened, punctured and densely pubescent, more or less semi-circular, anterior margin nearly straight; maxillary palpi brown, short, penultimate segment large and long, ultimate segment tapering distally; mentum brown, more or less trapezoid, sparsely and irregularly punctured.

Pronotum dark brown, punctured as fronto-vertex; median longitudinal furrow moderately deep with dilated anterior portion and tapering extremities; anterior and posterior discal depressions somewhat elliptical; outer depressions elongated, large and deep; anterior margin slightly emarginated, lined with a narrow translucent membrane; lateral margin retracted posteriorly from the anterior third, retracted portion lined with translucent membrane which encircles the posterior angle; posterior margin arched medially; anterior and posterior angles broadly rounded.

Scutellum black, triangular, glittering.

Thoracic sterna dull black, roughened and pubescent; prosternum slightly carinate longitudinally; mesosternum extending posteriorly between the middle coxae; metasternum large.

Elytra brown, moderately coarsely and deeply punctured, some punctures arranged in longitudinal direction; intervals shining, with minute lines and generally wider than the punctures; inner and outer margins with minute elevated border, those of the former more prominent posteriorly; humerales and lateral channels moderately prominent; anterior angles moderately sharp, posterior angles broadly rounded.

Legs brown; anterior coxae peg-like, pubescent and granulate; middle coxae nearly globular, pubescent and granulate; femora sparsely and setigerously punctured; tibiae shining, nearly straight, thickened distally, spinose; distal segment of tarsi much longer; claws slender and curved.

Five proximal abdominal sterna dull black, roughened and pubescent, narrow; sixth sternum dark brown, narrow, minutely punctured and pubescent posteriorly, proximal area roughened; seventh sternum dark brown, shining, punctured, posterior margin arched, minutely notched medially.

Basal lobe of phallus strongly curved, constricted at the middle, distal extremity pointed; distal lobe short, rounded distally; lateral lobes curved, distal ends with short setae.

Holotype, one male from Lou-fong-tsouen, Yunnan Province, March 26, 1940, collected by the author. Allotype, one female, with the same locality and date as the holotype. Paratype, seven specimens with the same locality and date as the holotype. All types in the insect collection of Sun Yatsen University.

Ochthebius (Bothochius) lobatus, sp. nov.

This species is very close to *O. flexus*, but separable from it by the larger size (2.16 mm. long, 1.08 mm. wide), by the less prominent punctures on the head and the pronotum, by the deeper notch on anterior margin of labrum and by the absence of distinct minute lines on the interstices of elytra. The distal end of the basal lobe of the phallus of this species has the two sides equally convergent, while that of *O. flexus* has the two sides unequally convergent and the distal lobe of this species is in the form of a more or less circular lobe while that of *O. flexus* is in the form of an elongated lobe.

Holotype, one male from Chungking, Szechuan Province, August 8, 1942, collected by Miss S. C. Chen. Allotype, one female with the same locality and date as the holotype. Paratypes, twenty-six specimens with the same locality and date as the holotype. All types in the insect collection of Sun Yatsen University.

Ochthebius (Hymenodes) exilis, sp. nov.

Size, 1.80 mm. long, 0.80 mm. wide.

Body color dark brown, with metallic shining, dorsal surface covered with moderately long procumbent hairs. Head dark brown, with large and sparse indistinct punctures; fronto-vertex and clypeus with minute dense granules; two large more or less elliptical deep depressions between the compound eyes and a smaller median one behind; epistomal suture slightly arched; clypeus somewhat trapezoid; labrum semicircular, densely and moderately coarsely punctured, with dense long hairs; maxillary palpi brown, penultimate segment large and long, ultimate segment slightly tapering distally; mentum dark brown, somewhat rectangular, anterior margin moderately deeply emarginated at the middle and slightly irregularly sculptured and punctured, intervals shining.

Pronotum dark brown, disc very minutely granulated and moderately sparsely and minutely punctured; median longitudinal furrow attenuated posteriorly, with tapering extremities; anterior discal depressions nearly rounded, posterior discal depressions elliptical; outer depressions large; anterior margin nearly straight; lateral margin retracted posteriorly from the point just in front of the middle, lined with translucent membrane which encircles the posterior angles; posterior margin arched; anterior angles rectangular, posterior angles rounded.

Scutellum dark brown, triangular, shining.

Thoracic sterna black, roughened; prosternum finely pubescent; mesosternum pubescent laterally, the median area raised into a long and triangular plate extending posteriorly between the middle coxae; metasternum densely pubescent, the posterior margin with a small notch medially.

Elytra dark brown; each elytron with ten series of punctures; interstices slightly raised, subequal to or slightly broader than the punctures in width and minutely granulated; inner margin with minute glittering border; lateral margin slightly arched, with minute elevated border; humerales prominent; anterior angles rectangular, posterior angles rounded.

Legs brown; anterior and middle coxae, more or less peg-like, roughened, pubescent; femora irregularly and setigerously punctured; tibiae thickened distally, strongly spinose; distal segment of tarsi long, subequal to the preceding segments together; claws slender and curved.

Five proximal abdominal sterna dull black, narrow, roughened and pubescent; sixth sternum broader, dark brown, shining, roughened; seventh sternum small; several slender setae at the distal end of the last abdominal tergum.

Basal lobe of the phallus long and curved; distal lobe short, blade-like; lateral

lobes slender, shorter than the basal lobe, distally with minute setae.

Holotype, one male from Lou-fong-tsouen, Yunnan Province, March 20, 1940, collected by the author. Allotype, one female with the same locality and date as the holotype. Paratype, eight specimens with the same locality and date as the holotype. All types in the insect collection of Sun Yatsen University.

Ochthebius (Hymenodes) octofoveatus, sp. nov.

Size, 1.68 mm. long, 0.80 mm. wide.

Head dark brown, distinctly granulated, with metallic shining; fronto-vertex with several shallow punctures; two large depressions between the compound eyes and a smaller median triangular depression behind, a small swelling present at the postero-lateral corner of each depression, median part of fronto-vertex slightly elevated as a rectangular area; epistomal suture arched; clypeus transverse; labrum indistinctly granulated, punctured, anterior margin with a semicircular deep notch at the middle; maxillary palpi dark brown, penultimate segment large, somewhat clavate, ultimate segment with tapering distal end; mentum brown, somewhat rectangular, roughened, minutely unevenly punctured, the anterior margin slightly emarginated.

Pronotum dark brown, disc evenly and minutely granulated; median longitudinal furrow with tapering extremities and separated into two parts by a median small swelling; anterior discal depression somewhat elliptical; posterior discal depression elongated, slightly oblique; two small discal depressions exterior to the anterior discal depressions and two larger ones exterior to the posterior discal depression; outer depressions large and long; anterior margin nearly straight, with a narrow translucent membrane, lateral margin retracted posteriorly from the anterior third, the retracted portion lined with membranous border; anterior angles somewhat rectangular, posterior angle broadly rounded.

Scutellum triangular, finely granulated.

Prosternum and mesosternum dark brown, granulated, the former carinated along the middle, extended posteriorly between the front coxae medially, the latter extended posteriorly between the middle coxae as a triangular plate; metasternum brown, roughened, very thinly pubescent, minutely notched posteriorly.

Elytra dark brown, each elytron with ten series of punctures; interstices glabrous, slightly raised and generally broader than or subequal to the punctures; inner margin with a minute glittering border; lateral margin arched, with minute elevated border; lateral channels and humerales prominent; anterior angles rounded, posterior angles broadly rounded.

Legs brown; front and middle coxae peg-like, roughened, thinly pubescent; femora and tibiae with minute sculpture; tibial spines moderately dense; distal segment of tarsi large and long; claws long and curved.

Abdomen brown, roughened; five proximal sterna narrow, thinly pubescent; sixth sternum broader, the median area shining and minutely irregularly punctured, roughened and thinly pubescent proximo-laterally, irregularly and minutely punctured and thinly pubescent disto-laterally; seventh sternum somewhat semicircular, shining, minutely and irregularly punctured, the proximal area with indistinct sculptured.

Holotype, one female from Lou-fong-tsouen, Yunnan Province, March 26, 1940, collected by the author, in the insect collection of Sun Yatsen University.